

IN THE CLAIMS:

1. (Currently amended) An implantable defibrillation lead, comprising:
 - a lead body including a distal portion terminated by a distal tip, the distal tip including a fixation element coupled thereto, the fixation element adapted to couple the lead to an endocardial surface of a right ventricle;
 - a defibrillation electrode coupled to the distal portion of the lead body and positioned along the distal portion of the lead body such that a portion of the electrode being located in proximity to a right ventricular apex when the fixation element couples the lead to the endocardial surface; and
 - a physiological sensor adapted to function in a high flow region of a circulatory system coupled to the distal portion of the lead body for sensing signals other than cardiac electrical signals, the sensor positioned along the distal portion of the lead body such that the sensor being located in a high flow region of the right ventricle and spaced apart from the endocardial surface when the fixation element couples the lead to the endocardial surface.
2. (Previously presented) The implantable lead of claim 1, wherein
 - the sensor being positioned proximal to the defibrillation electrode; and
 - when the fixation element couples the lead to the endocardial surface in proximity to the right ventricular apex, another portion of the defibrillation electrode extends approximately along a septal/ anterior free wall groove of the right ventricle.
3. (Previously presented) The implantable lead of claim 2, wherein
 - the distal tip further includes a pacing electrode; and
 - a distal end of the defibrillation electrode being positioned at a distance in a range of approximately 8 mm to approximately 14 mm from the pacing electrode.

4. (Previously presented) The implantable lead of claim 1, wherein the sensor being positioned proximal to the defibrillation electrode; and when the fixation element couples the lead to the endocardial surface along a right ventricular outflow tract, another portion of the defibrillation electrode extends approximately along a septal/anterior free wall groove of the right ventricle.
5. (Previously presented) The implantable lead of claim 1, wherein the sensor being positioned distal to the defibrillation electrode; and when the fixation element couples the lead to the endocardial surface along a right ventricular outflow tract, another portion of the defibrillation electrode being located in proximity to a lateral free wall of the right ventricle.
6. (Previously presented) The implantable lead of claim 5, wherein a distal end of the defibrillation electrode being positioned at a distance in a range of approximately 5 cm to approximately 8 cm from a distal end of the distal tip.
7. (Previously presented) The implantable lead of claim 1, wherein the sensor being positioned at a distance in a range of approximately 8 cm to approximately 12 cm from a distal end of the distal tip.
8. (Previously presented) The implantable lead of claim 7, wherein the distance being in a range of approximately 10 cm to approximately 12 cm.
9. (Previously presented) The implantable lead of claim 1, wherein the sensor being positioned at a distance in a range of approximately 2 cm to approximately 5 cm from a distal end of the distal tip.
10. (Previously presented) The implantable lead of claim 9, wherein the distance being in a range of approximately 3 cm to approximately 5 cm.

11. (Original) The implantable lead of claim 1, wherein the distal tip further includes a pair of pacing electrodes, the pair including an anode and a cathode.

12. (Previously presented) The implantable lead of claim 1, wherein the lead body further includes a proximal portion and further comprising a second defibrillation electrode coupled to the proximal portion of the lead body and, when the fixation element couples the lead to the endocardial surface, the second defibrillation electrode being located in proximity to a junction of a superior vena cava and an right atrium.

13. (Previously presented) The implantable lead of claim 1, wherein the high flow region being defined below a tricuspid valve.

14. (Previously presented) The implantable lead of claim 1, wherein the high flow region being defined along a right ventricular outflow tract.

15. (Original) The implantable lead of claim 1, wherein the lead body further includes a pre-formed bend positioned in between the sensor and the distal tip.

16. (Original) The implantable lead of claim 1, wherein the lead body further includes a preformed bend positioned in between the sensor and the defibrillation electrode.

17. (Original) The implantable lead of claim 16, wherein the lead body further includes second preformed bend positioned within a length of the defibrillation electrode.

18. (Previously presented) The implantable lead of claim 17, wherein the second preformed bend being out of plane from the preformed bend positioned in between the sensor and the defibrillation electrode.

19. (Original) The implantable lead of claim 2, wherein the lead body further includes a stiffening member extending proximally from the sensor.

20. (Original) The implantable lead of claim 19, wherein the stiffening member comprises a tube overlaying the lead body.

21. (Previously presented) The implantable lead of claim 20, wherein the tube being formed of a material comprising polyurethane.

22. (Currently amended) A method for implanting a lead, which includes a defibrillation electrode and a physiological sensor adapted to function in a high flow region of a circulatory system coupled to a body of the lead body for sensing signals other than cardiac electrical signals, the method comprising the step of positioning a distal portion of the lead body within a right ventricle such that a portion of the defibrillation electrode being positioned in proximity to an apex of the right ventricle and the sensor being positioned in a high flow region of the right ventricle and spaced apart from the endocardial surface.

23. (Previously presented) The method of claim 22, wherein the high flow region being defined below a tricuspid valve.

24. (Previously presented) The method of claim 22, wherein the high flow region being defined along a right ventricular outflow tract.

25. (Previously presented) The method of claim 22, wherein another portion of the defibrillation electrode being positioned in proximity to a septal/anterior free wall groove of the right ventricle.

26. (Previously presented) The method of claim 22, wherein another portion of the defibrillation electrode being positioned in proximity to a lateral free wall of the right ventricle.

27. (Original) The method of claim 22, further comprising the step of coupling the lead, via a fixation element coupled to a distal tip of the lead, to an endocardial surface of the right ventricle located in proximity to the apex of the right ventricle.

28. (Original) The method of claim 22, further comprising the step of coupling the lead, via a fixation element coupled to a distal tip of the lead, to an endocardial surface of the right ventricle located in proximity to an outflow tract of the right ventricle.

29. (Original) The method of claim 22, wherein the step of positioning comprises:

advancing a distal tip of the lead body toward an apex of the right ventricle;

withdrawing a stylet from within a distal portion of the lead body to allow a pre-formed curve of the lead body to bend;
pushing the lead body further into the right ventricle while further withdrawing the stylet to allow a second pre-formed curve of the lead body to bend.

30. (Currently amended) An implantable defibrillation lead, comprising:

a lead body including a distal portion terminated by a distal tip, the distal tip including a fixation element coupled thereto, the fixation element adapted to couple the lead to an endocardial surface of a right ventricle;

a defibrillation electrode coupled to the distal portion of the lead body and positioned along the distal portion of the lead body such that a portion of the electrode being located in proximity to a right ventricular apex when the fixation element couples the lead to the endocardial surface; and

a pressure sensor coupled to the distal portion of the lead body and adapted to function in a high flow region of a circulatory system, the sensor positioned along the distal portion of the lead body such that the sensor being located in a high flow region of the right ventricular chamber and spaced apart from the endocardial surface when the fixation element couples the lead to the endocardial surface.